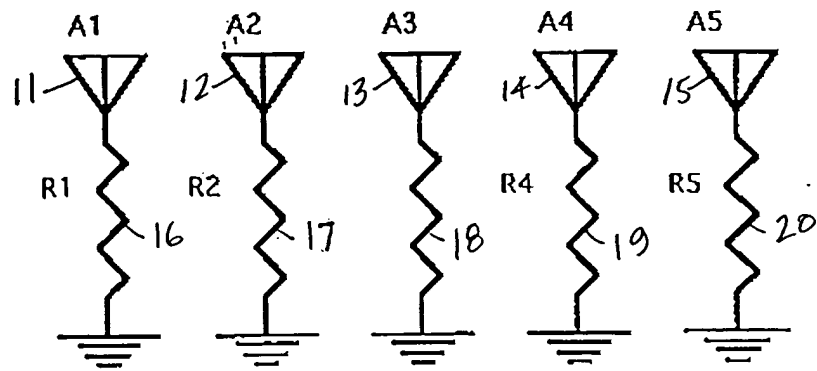
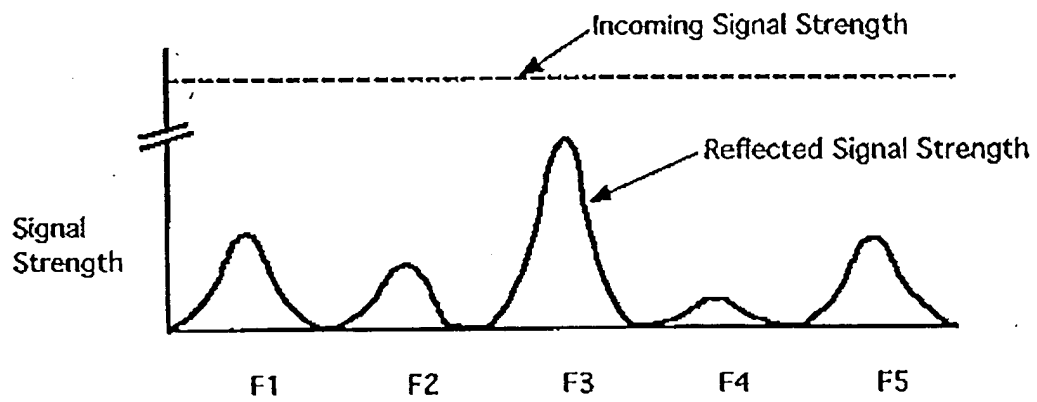


FIG. 1



Example case $0 < R3 < R1 = R5 < R2 < R4 < \infty$
 Antennas A1-A5 each tuned to a different frequencies, F1-F5.



Signature of reflected signal as encoded by impedance elements.

FIG. 2

Figure __Single Broad-band Antenna Scheme for Modulated Reflectance

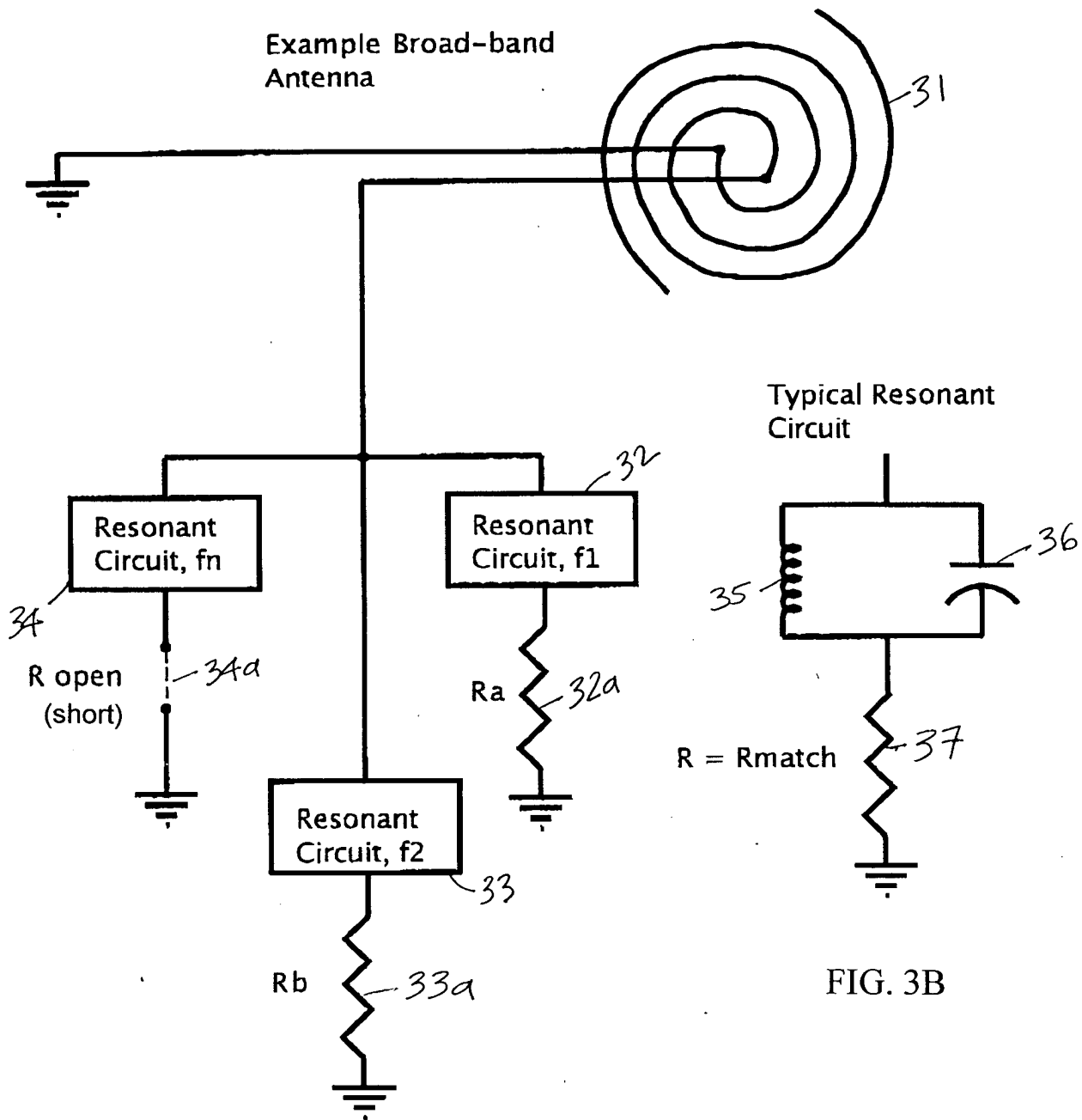
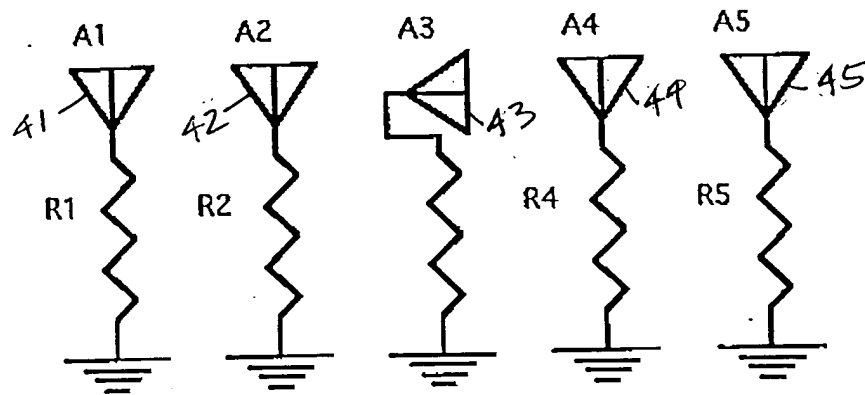


FIG. 3B

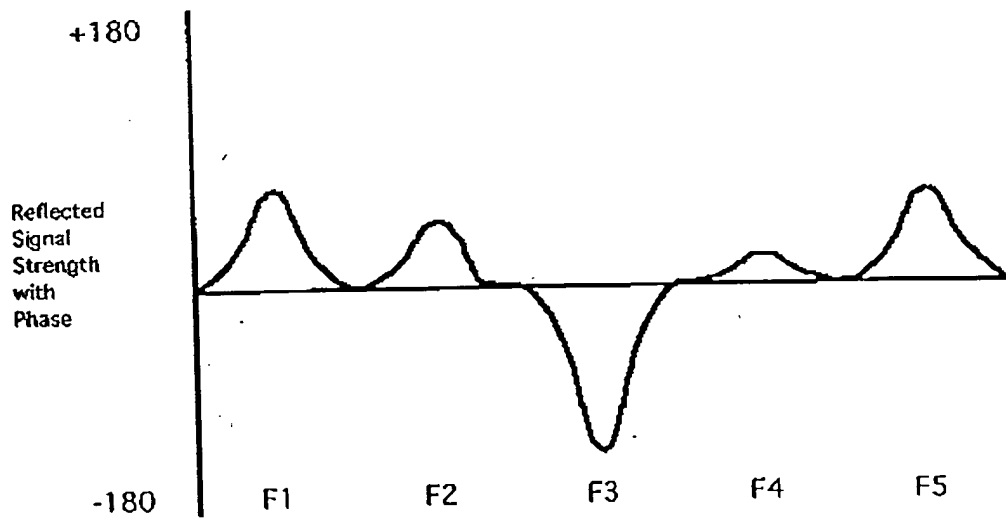
FIG. 3A

FIG. 4A



Example case $0 < R_3 > R_1 = R_5 < R_2 < R_4 < \infty$

Antennas A1, A2, A4 and A5 phased together, A3 phase 180° out from other antennas.



Signature of reflected signal as encoded by resistor elements and phasing of antennas.

FIG. 4B

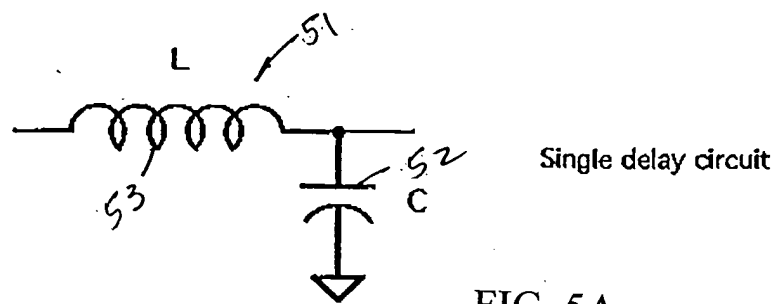


FIG. 5A

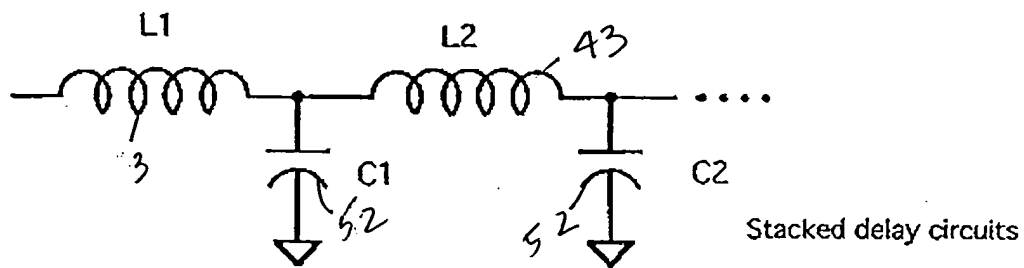


FIG. 5B

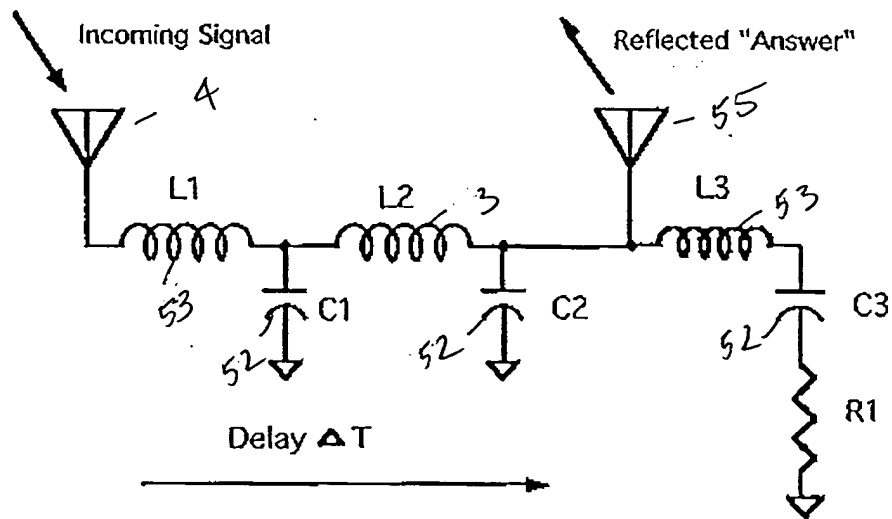
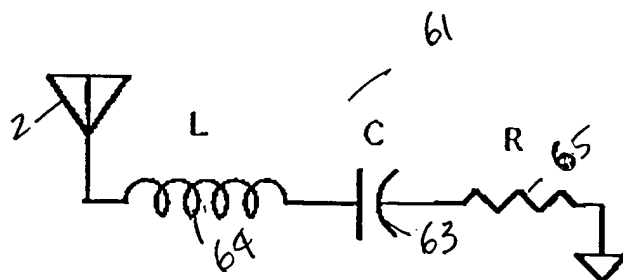


FIG. 5C

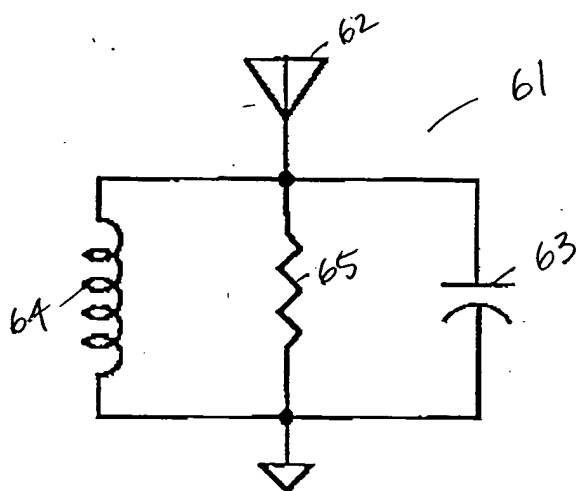


$$X_L = 2 \pi F C$$

$$X_C = \frac{1}{2 \pi F C}$$

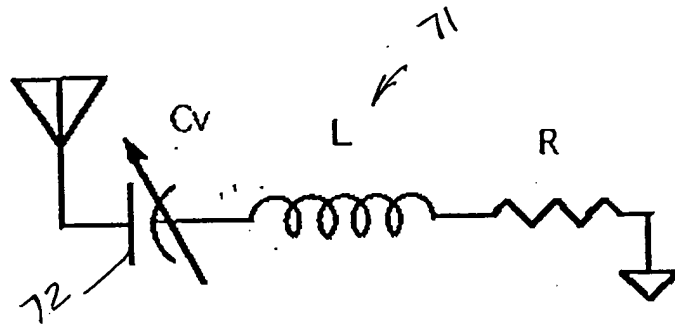
When $X_L = X_C$, the incoming signal is absorbed compared to any other Freq,

FIG. 6A



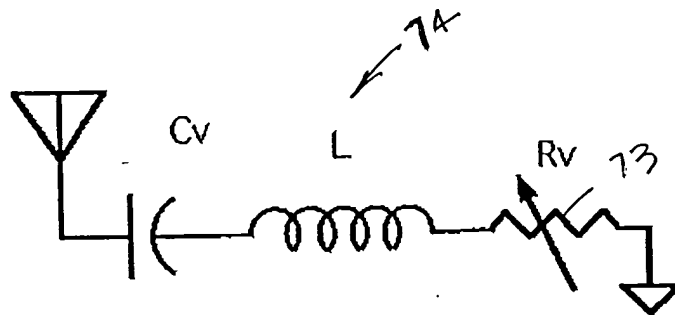
This circuit selectively reflects one frequency efficiently but absorbs at others.

FIG. 6B



Capacitor C_v changes due to spacing changes of the two capacitor electrodes.

FIG. 7A



Resistor R_v , e.g. a carbon loaded resistor reduces resistance at higher pressures when compressed.

FIG. 7B

